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DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS

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PATENT

Docket No. : 36598/RJP/B600

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As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **LARGE GAIN RANGE, HIGH LINEARITY, LOW NOISE MOS VGA**, the specification of which is attached hereto unless the following is checked:

X was filed on April 12, 2000 as United States Application Number or PCT International Application Number 09/547,968 and was amended on      (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

<u>Application Number</u>	<u>Country</u>	<u>Filing Date (day/month/year)</u>	<u>Priority Claimed</u>
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I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>Application Number</u>	<u>Filing Date</u>
60/129,133	April 13, 1999

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

<u>Application Number</u>	<u>Filing Date</u>	<u>Patented/Pending/Abandoned</u>
09/493,942	January 28, 2000	Pending
(which claimed the benefit of provisional applications as follows:		
60/117,609	January 28, 1999	
60/136,654	May 27, 1999)	
09/483,551	January 14, 2000	Pending
(which claimed the benefit of provisional applications as follows:		
60/116,003	January 15, 1999	
60/117,322	January 26, 1999	
60/122,754	February 25, 1999)	

**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS**

**Docket No. 36598/RJP/B600**

<u>Application Number</u>	<u>Filing Date</u>	<u>Patented/Pending/Abandoned</u>
09/439,101	November 12, 1999	Pending
(which claimed the benefit of provisional applications as follows:		
60/108,459	November 12, 1998	
60/108,209	November 12, 1998	
60/108,210	November 12, 1998	
60/117,609	January 28, 1999	
60/136,115	May 26, 1999	
60/136/116	May 26, 1999	
60/136,654	May 27, 1999	
60/159,726	October 15, 1999	

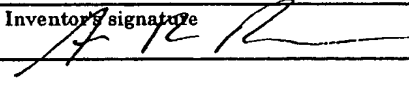
**POWER OF ATTORNEY:** I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application; or from the first or sole inventor named below in the event the application is not assigned; or from \_\_ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

R. W. Johnston	(17,968)	Gregory S. Lampert	(35,581)	Raymond R. Tabandeh	(43,945)
D. Bruce Prout	(20,958)	Grant T. Langton	(39,739)	Phuong-Quan Hoang	(41,839)
Hayden A. Carney	(22,653)	Constantine Marantidis	(39,759)	Cynthia A. Bonner	(44,548)
Richard J. Ward, Jr.	(24,187)	Marilyn R. Khorsandi	(45,744)	Jun-Young E. Jeon	(43,693)
Russell R. Palmer, Jr.	(22,994)	Daniel R. Kimbell	(34,849)	Marc A. Karish	(44,816)
LeRoy T. Rahn	(20,356)	Craig A. Gelfound	(41,032)	John F. O'Rourke	(38,985)
Richard D. Seibel	(22,134)	Syed A. Hasan	(41,057)	Richard J. Paciulan	(28,248)
Walter G. Maxwell	(25,355)	Kathleen M. Olster	(42,052)	Josephine E. Chang	(46,083)
William P. Christie	(29,371)	Daniel M. Cavanagh	(41,661)	Frank L. Cire	(42,419)
David A. Dillard	(30,831)	Molly A. Holman	(40,022)	Harold E. Wurst	(22,183)
Thomas J. Daly	(32,213)	Lucinda G. Auciello	(42,270)	Robert A. Green	(28,301)
Vincent G. Gioia	(19,959)	Norman E. Carte	(30,455)	Derrick W. Reed	(40,138)
Edward R. Schwartz	(31,135)	Joel A. Kauth	(41,886)	Stephen D. Burbach	(40,285)
John D. Carpenter	(34,133)	Patrick Y. Ikehara	(42,681)	David B. Sandelands, Jr.	(46,023)
David A. Plumley	(37,208)	Mark Garscia	(31,953)	Heidi L. Eisenhut	(P-46,812)
Wesley W. Monroe	(39,778)	Gary J. Nelson	(44,257)		

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

**DIRECT TELEPHONE CALLS TO :** Richard J. Paciulan, 626/795-9900  
**SEND CORRESPONDENCE TO :** CHRISTIE, PARKER & HALE, LLP  
P.O. Box 7068, Pasadena, CA 91109-7068

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first joint inventor <b>Arya R. Behzad</b>	Inventor's signature 	Date <b>8/10/00</b>
Residence and Post Office Address <b>Danville, California</b>		Citizenship <b>U.S.A.</b>

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Arya R. Behzad

Appl. No. 09/547,968

Filed: April 12, 2000

For: **Large Gain Range, High Linearity,  
Low Noise MOS VGA**

Art Unit: 2815

Examiner: Wojciechowicz, E.

Atty. Docket: 1875.1380008

### **Revocation of Prior Power of Attorney and Appointment of New Attorneys of Record**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned, having express authority to represent Broadcom Corporation, the assignee of the entire right, title, and interest in the above-captioned application, by assignment filed at the U.S. Patent and Trademark Office on August 16, 2000 (copy enclosed), hereby revokes all powers of attorney heretofore given in the above-captioned application and appoints as his attorneys James D. Bennett, Registration No. 37,550 and David J. Rosmann, Registration No. 43,059, and the attorneys associated with Customer Number 28393, those attorneys currently being: Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, Registration No. 32,831; Michele A. Cimbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; Robert E. Sokohl, Registration No. 36,013; Eric K. Steffe, Registration No. 36,688; Michael Q. Lee, Registration No. 35,239; Steven R. Ludwig, Registration No. 36,203; John M. Covert, Registration No. 38,759; and Linda E. Alcorn, Registration No. 39,588, with full power of substitution, association, and revocation, to prosecute said application and to transact all business in the United States Patent and Trademark Office connected therewith.

The undersigned hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send all correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934.

Direct telephone calls to (202) 371-2600.

On behalf of Broadcom Corporation:

FOR: Broadcom Corporation

SIGNATURE: 

BY: William T Ruehle

TITLE: Vice President Chief Financial Officer

DATE: 7-17-01

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## Certificate Under 37 C.F.R. § 3.73(b)

Applicant: Arya R. Behzad

Application No.: 09/547,968

Filed: April 12, 2000

Entitled: Large Gain Range, High Linearity, Low Noise MOS VGA

Broadcom Corporation

(Name of Assignee)

, a corporation

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest, or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel 011015, Frame 0875, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:]** A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: 7-17-01

Name: William J Buehle

Title: Vice President Chief Financial Officer

Signature: [Signature]

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DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION

Docket No. 36598/RJP/B600

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## ASSIGNMENT

WHEREAS, I, ARYA R. BEHZAD, residing at Danville, California, have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled LARGE GAIN RANGE, HIGH LINEARITY, LOW NOISE MOS VGA, filed April 12, 2000, Application No. 09/547,968.

AND WHEREAS, BROADCOM CORPORATION, a California corporation, having a place of business at 16215 Alton Parkway, Irvine, California 92618-3616 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and I hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

AND I HEREBY covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY further covenant and agree that I will communicate to ASSIGNEE any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications, make all rightful oaths and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand this 10 day of August, 20 00.

  
Arya R. Behzad

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NOT FOR RECORDATION